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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PITARO, RYAN F

ART UNIT

PAPER NUMBER

2174

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/854,622	Applicant(s) FUJIEDA, MAKOTO	
	Examiner RYAN F. PITARO	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the Amendment filed 10/31/2007.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kellstrom ("Kellstrom", US 6,088,625) in view of Harrison et al ("Harrison", US 6,611,725) in further view of Yotsukura ("Yorsukura" US 6,647,380) in view of Foster et al ("Foster", US 5,278,979).

As per independent claim 1, Kellstrom teaches a computer readable recording medium storing a program for causing a computer to perform operations, comprising: displaying a unit based on assembly data and parts data in response to a display

request, the parts data including data about shapes of parts and version information about versions of the parts, the assembly data defining a structure of the unit formed by one or more parts (Kellstrom, col. 6, lines 34-38; col. 10, lines 47-54). Kellstrom fails to particularly point out information about individual parts. However, Harrison teaches information about individual parts which create an assembly, such as the one taught in Kellstrom, (Column 5 lines 58-66). Therefore it would have been obvious to an artisan at the time of the invention to combine the individual part information of Harrison with the system of Kellstrom. Motivation to do so would have been to provide an interrelated data structure to keep detailed features of each of the components. The modified Kellstrom fails to distinctly point out version information for each individual part. However, Yotsukura teaches storing the assembly data of the unit together with the version information about all parts that form the unit displayed, while assigning version information of the unit to the assembly data to be stored; and storing current and past versions of the parts data of each individual part (Column 2 lines 10-40). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified Kellstrom with the version information of Yotsukura. Motivation to do so would have been to provide a design system and method, which enable new parts of a design to be designed or constructed in a timesaving and cost-effective manner. The modified Kellstrom fails to teach copying the assembly data as a new object and assigning thereto the oldest version information of the assembly data. However, Foster teaches copying the assembly data as a new object and assigning thereto the oldest version information of the assembly data (Column 1 lines 34-57, forward deltas). Therefore it

would have been obvious to an artisan at the time of the invention to combine the teaching of Foster with the modified method of Kellstrom. Motivation to do so would have been to enable multiple changes to be made to a common base and enable more efficient utilization of storage media.

Independent claims 10-13 are similar in scope to claim 1, and are therefore rejected under similar rationale.

As per claim 5, which is dependent on claim 1, Kellstrom-Harrison-Yotsukura-Foster teaches the computer readable recording medium as claimed in claim 1, wherein part of the parts data is sub-assembly data that defines a sub-unit formed by one or more of the other individual parts (Kellstrom, col.9, lines 29-32).

As per claim 6, which is dependent on claim 5, Kellstrom-Harrison-Yotsukura-Foster teaches the computer readable recording medium as claimed in claim 5, further comprising: causing the sub-unit defined in the sub-assembly data specified in the display request to be displayed (Kellstrom, col. 9, lines 41-59); and assigning version information about the individual parts that form the sub-unit displayed to the sub-assembly data specified in the display request (Kellstrom, col. 9, lines 41-59, Yotsukura Column 2 lines 10-40). In Kellstrom, the ability to update a specific part within a subassembly allows for the sub-unit to be assigned version information.

As per claim 7, which is dependent on claim 5, Kellstrom-Harrison-Yotsukura-Foster teaches the computer readable recording medium as claimed in claim 5, further

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comprising updating, in response to an at-registration information updating request, the version information about the assembly data and the sub-assembly data having a lower structure with respect to the assembly data to latest versions thereof (Yotsukura, Figure 3).

As per claim 8, which is dependent on claim 1, Kellstrom-Harrison-Yotsukura-Foster teaches a medium further comprising assigning initialized version information to a copy of the assembly data when the copy of the assembly data is made (Harrison, Column 6 lines 6-46).

As per claim 9, which is dependent on claim 1, Kellstrom-Harrison-Yotsukura-Foster teaches a medium further comprising diverting, when the assembly data used to form a first product is diverted to a second product, the version information about the assembly data of the first product to diverted assembly data of the second product (Harrison, Column 6 lines 6-46).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kellstrom ("Kellstrom", US 6,088,625) and Harrison et al ("Harrison", US 6,611,725) in view of Yotsukura ("Yorsukura" US 6,647,380) and in view of Foster et al ("Foster", US 5,278,979) in view of Beppu et al. ("Beppu", US 5,777,877).

As per claim 4, which is dependent on claim 3, Kellstrom-Harrison-Yotsukura-Foster fails to distinctly point out the computer readable recording medium as claimed in claim 3, further comprising causing the parts of the unit to be emphatically displayed on

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the basis of parts data of a version different from a latest version when the display request is directed to states of parts at registration of the parts data. Beppu, however, teaches showing the correspondence between parts before and after a user recomposition of assemblies. This correspondence includes listing a part as "NEW" or "OLD" based on the parts version number (Beppu, col. 7, lines 59-67 and col. 8, lines 1-5). It would have been obvious to one skilled in the art at the time of invention to include the latest version identification of Beppu in the CAD system of Kellstrom-Harrison-Yotsukura-Foster because it would increase productivity by ensuring the user knows the version of each part in a given assembly.

Response to Arguments

Applicant's arguments with respect to claims 1,4-7,9-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN F. PITARO whose telephone number is

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(571)272-4071. The examiner can normally be reached on 7:00am - 4:30pm Mondays through Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. F. P./
Examiner, Art Unit 2174

/David A Wiley/
Supervisory Patent Examiner, Art Unit 2174